

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A vehicle antitheft system comprising:

an immobilizer unit including:

a first data processor;

a first communication part connected with the first data processor;

a first antenna connected with the first communication part;

a first storage connected with the first data processor, the first storage preliminarily storing first data for mutual authentication; and

a second storage connected with the first data processor; and

a portable unit including:

a second data processor;

a second communication part connected with the second data processor;

a second antenna connected with the second communication part;

a third storage connected with the second data processor, the third storage preliminarily storing the first data for mutual authentication; and

a fourth storage connected with the second data processor, the fourth storage preliminarily storing second data for mutual authentication different from the first data for mutual authentication;

wherein:

the immobilizer unit further includes an information reception part connected with the first data processor, and when a first instruction is fed into the information reception part, the first data processor and the second data processor authenticate each other ~~at least in part by:~~ (1) the first data processor transmitting via the first antenna an encrypted data based ~~in part on~~ the first data for mutual authentication stored in the first storage and (2) the second data processor receiving the encrypted data via the second antenna, and decrypting the encrypted data and comparing the decrypted data to the first data for mutual authentication stored in the third storage; and

responsive to the authentication between the first data processor and the second data processor, the second data processor further ~~stores, into the third storage and the fourth storage, one of the first data for mutual authentication and the second data for mutual authentication and transmits the stored one of the first data for mutual authentication and the second data for mutual authentication~~ stored in the fourth storage via the second antenna; and;

the first data processor further stores, into the second storage, ~~the one of the first data for mutual authentication and the second data for mutual authentication received via the first antenna~~ and transmits the second data for mutual authentication stored in the second storage via the first antenna; and

the second data processor further stores, into the third storage, the second data for mutual authentication received via the second antenna.

2. (Currently Amended) A vehicle antitheft system comprising:

an immobilizer unit including:

a first data processor;

a first communication part connected with the first data processor;

a first antenna connected with the first communication part;

a first storage connected with the first data processor, the first storage preliminarily storing first data for mutual authentication; and

a second storage connected with the first data processor, the second storage preliminarily storing ~~one of the first data for mutual authentication and~~ second data for mutual authentication different from the first data for mutual authentication; ~~the second data for mutual authentication received from the second data processor;~~ and

a portable unit including:

a second data processor;

a second communication part connected with the second data processor;

a second antenna connected with the second communication part; and

a third storage connected with the second data processor, the third storage preliminarily storing the first data for mutual authentication;

wherein, the immobilizer unit further includes an information reception part connected with the first data processor, and when a first instruction is fed into the information reception part, the first data processor and the second data processor authenticate each other ~~at least in part by:~~ (1) the first data processor transmitting via the first antenna an encrypted data based ~~in part on~~ the first data for mutual authentication stored in the first storage and (2) the second data processor receiving the encrypted data via the second antenna, and decrypting the encrypted data and comparing the decrypted data to the first data for mutual authentication stored in the third storage; and

responsive to the authentication between the first data processor and the second data processor, the first data processor ~~further transmits the one of the first data for mutual authentication and~~ the second data for mutual authentication that is stored in the second storage via the first antenna, and the second data processor

stores, into the third storage, ~~the one of the first data for mutual authentication and~~
the second data for mutual authentication received via the second antenna.

3. (Currently Amended) A vehicle antitheft system comprising:

an immobilizer unit including:

a first data processor;

a first communication part connected with the first data processor;

a first antenna connected with the first communication part;

a first storage connected with the first data processor, the first storage
preliminarily storing first data for mutual authentication; and

a second storage connected with the first data processor; and

a portable unit including:

a second data processor;

a second communication part connected with the second data
processor;

a second antenna connected with the second communication part; and

a third storage connected with the second data processor, the third
storage preliminarily storing the first data for mutual authentication;

wherein, the immobilizer unit further includes an information reception part
connected with the first data processor, and when a first instruction is fed into the
information reception part, the first data processor and the second data processor
authenticate each other ~~at least in part by~~: (1) the first data processor transmitting
via the first antenna an encrypted data based ~~in part on~~ the first data for mutual
authentication stored in the first storage and (2) the second data processor receiving
the encrypted data via the second antenna, ~~and decrypting the encrypted data and~~

comparing the decrypted data to the first data for mutual authentication stored in the third storage; and

_____ responsive to the authentication between the first data processor and the second data processor, the first data processor requests the second data processor via the first antenna to generate second data for mutual authentication different from the first data for mutual authentication;

responsive to the request from the first data processor, the second data processor further generates, stores into the third storage, and transmits via the second antenna, one of data identical to the first data for mutual authentication and the second data for mutual authentication different from the first data for mutual authentication; and

the first data processor stores, into the second storage, the one of the first data for mutual authentication and the second data for mutual authentication received via the first antenna and transmits the second data for mutual authentication stored in the second storage via the first antenna; and

the second data processor further stores, into the third storage, the second data for mutual authentication received via the second antenna.

4. (Currently Amended) A vehicle antitheft system comprising:

an immobilizer unit including:

a first data processor;

a first communication part connected with the first data processor;

a first antenna connected with the first communication part;

a first storage connected with the first data processor, the first storage preliminarily storing first data for mutual authentication; and

a second storage connected with the first data processor; and

a portable unit including:

a second data processor;

a second communication part connected with the second data processor;

a second antenna connected with the second communication part; and

a third storage connected with the second data processor, the third storage preliminarily storing the first data for mutual authentication;

wherein, the immobilizer unit further includes an information reception part connected with the first data processor, and when a first instruction is fed into the information reception part, the first data processor and the second data processor authenticate each other ~~at least in part~~ by: (1) the first data processor transmitting via the first antenna an encrypted data based ~~in part~~ on the first data for mutual authentication stored in the first storage and (2) the second data processor receiving the encrypted data via the second antenna, ~~and~~ decrypting the encrypted data ~~and comparing the decrypted data to the first data for mutual authentication stored in the third storage; and~~

responsive to the authentication between the first data processor and the second data processor, the first data processor further generates, stores into the second storage, and transmits via the first antenna, ~~one of data identical to the first data for mutual authentication and~~ second data for mutual authentication different from the first data for mutual authentication; ~~and~~

the second data processor stores, into the third storage, ~~the one of the first data for mutual authentication and the second data for mutual authentication received via the second antenna, the second data being received from the second data processor and stored in the second storage.~~

5. (Previously Presented) The vehicle antitheft system according to claim 1, wherein, upon input of a second instruction into the information reception part, when both of data stored in the second storage and the third storage are the second

data for mutual authentication, either the first data processor generates and stores into the second storage first accumulation data different from the second data for mutual authentication, or the second data processor generates and stores into the third storage the first accumulation data; and

when both of data stored in the second storage and the third storage are identical to the first data for mutual authentication, either the first data processor generates and stores into the second storage second accumulation data different from the first data for mutual authentication, or the second data processor generates and stores into the third storage the second accumulation data.

6. (Previously Presented) The vehicle antitheft system according to claim 1, wherein, upon input of a second instruction into the information reception part, when both of data stored in the second storage and the third storage are the second data for mutual authentication, the first data processor transmits the first data for mutual authentication stored in the first storage via the first antenna, and the second data processor stores, into the third storage, the first data for mutual authentication received via the second antenna; and

when both of data stored in the second storage and the third storage are identical to the first data for mutual authentication, either the first data processor generates and stores into the second storage second accumulation data different from the first data for mutual authentication, or the second data processor generates and stores into the third storage the second accumulation data.

7. (Previously Presented) The vehicle antitheft system according to claim 1, wherein the portable unit further has a fifth storage preliminarily storing an ID code, and the first data processor and the second data processor authenticate each other also using the ID code.

8. (Original) The vehicle antitheft system according to claim 7, wherein the immobilizer unit further has a sixth storage, the second data processor transmits, via the second antenna, the ID code stored in the fifth storage, and the first data processor stores, into the sixth storage, the ID code received via the first antenna.

9. (Original) The vehicle antitheft system according to claim 8, wherein upon input of a second instruction into the information reception part, the first data processor generates third accumulation data different from the ID code stored in the sixth storage, and stores the third accumulation data into the sixth storage.

10. (Previously Presented) The vehicle antitheft system according to claim 2, wherein, upon input of a second instruction into the information reception part, when both of data stored in the second storage and the third storage are the second data for mutual authentication, either the first data processor generates and stores into the second storage first accumulation data different from the second data for mutual authentication, or the second data processor generates and stores into the third storage the first accumulation data; and

when both of data stored in the second storage and the third storage are identical to the first data for mutual authentication, either the first data processor generates and stores into the second storage second accumulation data different from the first data for mutual authentication, or the second data processor generates and stores into the third storage the second accumulation data.

11. (Previously Presented) The vehicle antitheft system according to claim 2, wherein, upon input of a second instruction into the information reception part, when both of data stored in the second storage and the third storage are the second data for mutual authentication, the first data processor transmits the first data for mutual authentication stored in the first storage via the first antenna, and the second data processor stores, into the third storage, the first data for mutual authentication received via the second antenna; and

when both of data stored in the second storage and the third storage are identical to the first data for mutual authentication, either the first data processor generates and stores into the second storage second accumulation data different from the first data for mutual authentication, or the second data processor generates and stores into the third storage the second accumulation data.

12. (Previously Presented) The vehicle antitheft system according to claim 2, wherein the portable unit further has a fifth storage preliminarily storing an ID

code, and the first data processor and the second data processor authenticate each other also using the ID code.

13. (Previously Presented) The vehicle antitheft system according to claim 12, wherein the immobilizer unit further has a sixth storage, the second data processor transmits, via the second antenna, the ID code stored in the fifth storage, and the first data processor stores, into the sixth storage, the ID code received via the first antenna.

14. (Previously Presented) The vehicle antitheft system according to claim 13, wherein upon input of a second instruction into the information reception part, the first data processor generates third accumulation data different from the ID code stored in the sixth storage, and stores the third accumulation data into the sixth storage.

15. (Previously Presented) The vehicle antitheft system according to claim 3, wherein, upon input of a second instruction into the information reception part, when both of data stored in the second storage and the third storage are the second data for mutual authentication, either the first data processor generates and stores into the second storage first accumulation data different from the second data for mutual authentication, or the second data processor generates and stores into the third storage the first accumulation data; and

when both of data stored in the second storage and the third storage are identical to the first data for mutual authentication, either the first data processor generates and stores into the second storage second accumulation data different from the first data for mutual authentication, or the second data processor generates and stores into the third storage the second accumulation data.

16. (Previously Presented) The vehicle antitheft system according to claim 3, wherein, upon input of a second instruction into the information reception part, when both of data stored in the second storage and the third storage are the second data for mutual authentication, the first data processor transmits the first data for mutual authentication stored in the first storage via the first antenna, and the second

data processor stores, into the third storage, the first data for mutual authentication received via the second antenna; and

when both of data stored in the second storage and the third storage are identical to the first data for mutual authentication, either the first data processor generates and stores into the second storage second accumulation data different from the first data for mutual authentication, or the second data processor generates and stores into the third storage the second accumulation data.

17. (Previously Presented) The vehicle antitheft system according to claim 3, wherein the portable unit further has a fifth storage preliminarily storing an ID code, and the first data processor and the second data processor authenticate each other also using the ID code.

18. (Previously Presented) The vehicle antitheft system according to claim 17, wherein the immobilizer unit further has a sixth storage, the second data processor transmits, via the second antenna, the ID code stored in the fifth storage, and the first data processor stores, into the sixth storage, the ID code received via the first antenna.

19. (Previously Presented) The vehicle antitheft system according to claim 18, wherein upon input of a second instruction into the information reception part, the first data processor generates third accumulation data different from the ID code stored in the sixth storage, and stores the third accumulation data into the sixth storage.

20. (Previously Presented) The vehicle antitheft system according to claim 4, wherein, upon input of a second instruction into the information reception part, when both of data stored in the second storage and the third storage are the second data for mutual authentication, either the first data processor generates and stores into the second storage first accumulation data different from the second data for mutual authentication, or the second data processor generates and stores into the third storage the first accumulation data; and

when both of data stored in the second storage and the third storage are identical to the first data for mutual authentication, either the first data processor generates and stores into the second storage second accumulation data different from the first data for mutual authentication, or the second data processor generates and stores into the third storage the second accumulation data.

21. (Previously Presented) The vehicle antitheft system according to claim 4, wherein, upon input of a second instruction into the information reception part, when both of data stored in the second storage and the third storage are the second data for mutual authentication, the first data processor transmits the first data for mutual authentication stored in the first storage via the first antenna, and the second data processor stores, into the third storage, the first data for mutual authentication received via the second antenna; and

when both of data stored in the second storage and the third storage are identical to the first data for mutual authentication, either the first data processor generates and stores into the second storage second accumulation data different from the first data for mutual authentication, or the second data processor generates and stores into the third storage the second accumulation data.

22. (Previously Presented) The vehicle antitheft system according to claim 4, wherein the portable unit further has a fifth storage preliminarily storing an ID code, and the first data processor and the second data processor authenticate each other also using the ID code.

23. (Previously Presented) The vehicle antitheft system according to claim 22, wherein the immobilizer unit further has a sixth storage, the second data processor transmits, via the second antenna, the ID code stored in the fifth storage, and the first data processor stores, into the sixth storage, the ID code received via the first antenna.

24. (Previously Presented) The vehicle antitheft system according to claim 23, wherein upon input of a second instruction into the information reception part, the first data processor generates third accumulation data different from the ID code

stored in the sixth storage, and stores the third accumulation data into the sixth storage.